

NOTES ON SOME OF THE EBENACEAE AND VERBENACEAE  
OF THE SOLOMON ISLANDS COLLECTED ON THE  
ARNOLD ARBORETUM EXPEDITION, 1930-1932<sup>1</sup>

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*With plates 120-122*

EBENACEAE

**Diospyros ellipticifolia** (Stokes) Bakhuizen, Enum. Mal. Eben. in Gard. Bull. Str. Settl. 7(2): 162 (1933).

*Maba elliptica* J. R. et G. Forster, Char. Gen. Pl. 122, tab. 6 (1776).

Y s a b e l I s l a n d : Tiratoña, alt. 600 m., Brass 3318, ♂, flor., Dec. 8, 1932. — Vernacular name "Gaitutunu."

**Diospyros ferrea** (Willd.) Bakhuizen, Enum. Mal. Eben. in Gard. Bull. Str. Settl. 7(2): 162 (1933).

*Maba buxifolia* (Rottb.) A. L. Jussieu in Ann. Mus. Hist. Nat. 5: 418 (1804).

**Diospyros ferrea** var. **salomonensis** Bakhuizen, var. nova.

Subsimilis *D. ellipticifoliae*, sed staminibus 9, foliis submajoribus differt.

Ramuli teretes, rugosi, dense tuberculatim lenticellati. Folia elliptica vel oblongo-lanceolata, basi obtusa vel rotundata, apice obtusa vel breviter obtuse acuminata, 5-20 cm. longa, 3-7 cm. lata, chartacea vel tenuiter coriacea, supra atro-viridia, nitida vel statu sicco subopaca, subtus pallidiora, primum subtus appresse pubescentia, denique costa excepta utrinque glabra, nervis lateralibus utrinsecus 7-10 vel pluribus, utrinque subinconspicuis, venis reticulatis laxis utrinque subprominulis invisibilibus; petiolus semiteres, appresse rufo-pubescentia, glabrescens, 0.3-0.5 cm. longus. Flores masculi sessiles, 3-5-ni, cymosi vel in

<sup>1</sup>In the latter part of 1930 Mr. S. F. Kajewski, in continuation of his botanical work on behalf of the Arnold Arboretum in the New Hebrides and North Queensland, left Brisbane for Bougainville Island and the British Solomon Islands. He resigned in June 1931 and in July 1932 his place was taken by Mr. L. J. Brass, who remained there until December 1932 when he returned to Brisbane, and after a few weeks left for Papua as botanist to the Archbold Expedition of the American Museum of Natural History, New York. Mr. C. T. White, Brisbane, to whom the collections have been entrusted for arrangement, advises that they have now been roughly sorted into families. Several of these have been sent to specialists for critical examination, and we have already received determinations of the Ebenaceae and Verbenaceae from Dr. R. C. Bakhuizen van den Brink. The descriptions of the new species, new varieties and of one new combination are offered herewith. The list of other determinations will be included in the general account of the Bougainville and Solomon Islands collection to be published at a later date.—Ed.



pseudo-racemis dispositi; calyx urceolatus, 3-dentatus, in anthesi saepius rumpens, intus versus apicem appresse rufo-pubescens; corolla albida, versus lobos purpurascens; stamina 9, sublibera, glabra. Fructus ellipsoideus vel subglobosus, primum appresse pubescens, maturitate glabrescens, flavescens, 1.5–2 cm. longus, 1.5–1.75 cm. diam.; calyx fructifer subpatelliformis, marginibus reflexus, extus sparse appresse pubescens, glabrescens, rugulosus, intus toto superficie sericeus, 1–1.2 cm. diam.; semina oblonga, triquetra, utrinque acuta, facie recta, dorso convexa, a latere compressa, rugulosa, nigra, 1.2–1.5 cm. longa, 0.5–0.7 cm. lata, 0.5 cm. crassa; albumen aequabile.

U l a w a I s l a n d : *Brass* 2958, ♀, fruct., Oct. 5, 1932.  
Y s a b e l I s l a n d : Jaukau, *Brass* 3152, ♂, flor., Nov. 19, 1932. — Vernacular names “Aibul” (under no. 2958) and “Gno-gno-finete” (under no. 3152).

**Diospyros insularis** Bakhuizen, Enum. Mal. Eben. in Gard. Bull. Str. Settl. 7(2): 173 (1933). PLATE 120, 121

Arbuscula. Folia elliptico-oblonga, basi cordata, apice breviter obtuse acuminata, supra atro-viridia, statu sicco olivacea, subopaca, nervis lateralibus 7–12 distantibus, secus marginem non vel indistincte anastomosantibus, utrinque prominentibus; petiolus subteres vel apicem versus subdepressus. Fructus axillaris, sessilis, plerumque solitarius, ellipsoideus vel subglobosus, utrinque rotundatus, primum sericeus, statu maturo glabratus, ruber, statu sicco niger, rugulosus, opacus, 2–2.5 cm. diam.; calyx fructifer viridis, valde accrescens, extus glaber, 3.5–4 cm. diam., tubo crasso, plano-cupuliforme, subquadrato, intus rufo-sericeo, rimo elevato, 2–2.5 cm. diam., lobis late ovatis obtusis vel suborbicularibus, coriaceis, patulo-recurvis vel reflexis, striato-nervosis, utrinque glabris, 1–1.5 cm. longis, basi 1.5–1.75 cm. latis; semina usque ad 8, oblongo-ellipsoidea, triquetra, dorso convexa, a latere compressa, ca. 1.5 cm. longa, 0.7 cm. lata, 0.4–0.5 cm. crassa; testa rugulosa, nigra; albumen aequabile.

Y s a b e l I s l a n d : Maringe, *Brass* 3166, ♀, fruct., Nov. 22, 1932.

**Diospyros maritima** Blume, Bijdr. Flor. Ned. Ind. 669 (1825).

Y s a b e l I s l a n d : Sigana, alt. 100 m., *Brass* 3450, ♀, fruct., Jan. 11, 1933. — Vernacular name “Gegila.”

**Diospyros samoensis** A. Gray in Proc. Amer. Acad. 5: 326 (1861).

S a n C h r i s t o v a l I s l a n d : Star Harbor, *Brass* 3073, ♂, flor., Oct. 18, 1932. N g e l a G r o u p : Nayotana Island, *Brass* 3240, ♀, fruct., Nov. 16, 1932.



## VERBENACEAE

**Avicennia marina** (Forsk.) Vierhapper, Beitr. Kennt. Flor. Süd-arab. in Denkschr. Akad. Wiss. Wien, **71**: 435 (1907).

**Avicennia marina** var. **resinifera** (Forst.) Bakhuizen, Rev. Gen. Avic. in Bull. Jard. Bot. Buitenz., ser. **3**(2): 210, tab. 16 (1921).

**Malaita Island**: Quoimonapu, sea level, *Kajewski* 2344, Dec. 11, 1930. — Vernacular name "Bu-bula."

**Callicarpa pedunculata** R. Brown, Prod. Flor. Nov. Holl. 513 (1810).

**Guadalcanal Island**: Berande River, sea level, *Kajewski* 2420, Jan. 7, 1930. — Vernacular name "Bau."

**Callicarpa pentandra** Roxb., Flor. Ind. **1**: 409 (1820) var. **typica** (Schau.) Bakhuizen, forma **genuina** Bakhuizen in H. J. Lam. & Bakhuizen, Rev. Verb. in Bull. Jard. Bot. Buitenz., sér. 3, **3**(1): 12 (1921).

**Bougainville Island**: Kieta, sea level, *Kajewski* 1560, March 21, 1930; Kupei Gold Field, alt. 950 m., *Kajewski* 1643, April 7, 1930; Kugu-maru, Buin, alt. 150 m., *Kajewski* 1841, June 9, 1930. **San Cristoval Island**: Waimamura, alt. 200 m., *Brass* 2625, August 10, 1932. — Vernacular name "Sor-ku-ku" (under no. 1841).

**Callicarpa pentandra** var. **paloensis** (Elm.) Bakhuizen, forma **furfuracea** Bakhuizen in H. J. Lam & Bakhuizen, Rev. Verb. in Bull. Jard. Bot. Buitenz., sér. 3, **30**: 15 (1921).

**Malaita Island**: Quoimonapu, sea level, *Kajewski* 2340, Dec. 11, 1930. **Guadalcanal Island**: Ma-massa, Konga, alt. 400 m., *Kajewski* 2485, Feb. 12, 1931; Vulolo, Tutuve Mt., alt. 1200 m., *Kajewski* 2540, April 20, 1931. — Vernacular names, "Quoi-esa" (under no. 2340), "Kim-berri" (under no. 2485) and "Kimberi" (under no. 2540).

**Clerodendron Buchanani** (Roxb.) Walpers, Rep. Bot. Syst. **4**: 108 (1845).

**Bougainville Island**: *Kajewski* 1606, March 29, 1930; Karngu, Buin, sea level, *Kajewski* 2222, Oct. 6, 1930. **San Cristoval Island**: Waimamura, *Brass* 3140, Oct. 1932. **Ysabel Island**: Sigana, alt. 20 m., *Brass* 3465, Jan. 13, 1933. — Vernacular name "Arka-koo" (under no. 2222).

**Clerodendron confusum** Hallier f. in Meded. Rijks Herb. Leiden, **37**: 65 (1918).



B o u g a i n v i l l e I s l a n d : Kupei Gold Field, alt. 900 m., *Kajewski* 1687, April 11, 1930; Kugu-maru, Buin, alt. 150 m., *Kajewski* 1925, August 4, 1930; same locality, *Kajewski* 1978, August 23, 1930. M a l a i t a I s l a n d : Quoi-mon-apu, sea level, *Kajewski* 2341, Dec. 11, 1930. G u a d a l c a n a l I s l a n d : Vulolo, Tutuve Mt., alt. 1200 m., *Kajewski* 2502, April 14, 1931. S a n C r i s t o v a l I s l a n d : Hinuahaoro, alt. 900 m., *Brass* 2919, Sept. 22, 1932. Y s a b e l I s l a n d : Tiratoña, alt. 600 m., *Brass* 3403, Dec. 29, 1932. — Vernacular names “Koru-kopu” (under no. 1925), “E-yapapor” (under no. 1978), “Kaka-fair” (under no. 2341), “Ambus-gorle-le” (under no. 2502) and “Fuho” (under no. 3403).

This species is closely related to *C. buruanum* Miq. which differs in the much longer corolla-tube and also to *C. infortunatum* L., which has a glabrous corolla and a longer corolla-tube. Nevertheless all these species may perhaps be considered as only extreme forms of *C. infortunatum* L.

**Clerodendron inerme** (L.) Gaertner, *Fruct. Sem. Plant.* 1: 271, tab. 75 (1788).

B o u g a i n v i l l e I s l a n d : Karngu, Buin, sea level, *Kajewski* 2244, Oct. 12, 1930. G u a d a l c a n a l I s l a n d : Berande, sea level, *Kajewski* 2407, Jan. 5, 1931. — Vernacular names “Pumbarg-arū” (under no. 2244) and “A-la-loi-alugi” (under no. 2407).

**Faradaya amicorum** (Seem.) Seemann in *Jour. Bot.* 3: 258 (1865).

*Clerodendron amicorum* Seemann in *Bonplandia*, 10: 249 (1862).

**Faradaya amicorum** var. **salomonensis** Bakhuizen, var. nova.

Frutex flexuosus plerumque scandens, primum appresse pubescens, denique glabrescens, in ramulis florigeris cinereo-subsericeus. Folia valde variabilia, lanceolata-oblonga vel obovata, utrinque attenuata, basi acute vel obtuse cuneata, apice breviter subacute acuminata, utrinque glabra, 7–20 cm. longa, 3.5–10 cm. lata, nervis lateralibus distantibus, utrinsecus 5–7. Inflorescentiae axillares vel in paniculis speciosis terminalibus dispositae, multiflorae, cymis subinde trichotomis, basi conspicue bracteolatis; bracteolae oblongo-ellipticae vel sublanceolatae, utrinque sericeae, 1–2.5 cm. longae, 0.3–1 cm. latae. Flores subparvi, in alabastro globosi, pedicellati; pedicelli teretes, graciles, cinereo-sericei, basi bracteolati, 0.5–1.5 cm. longi; calyx primum subclausus vel apice poro dehiscens, denique truncatus vel margine undatus, vel dentatus vel etiam distincte lobatus, 0.5–0.6 cm. longus, 0.7–1 cm. diam., fructifer accrescens, saepius irregulariter ruptus, extus sparse pubescens, basi excepta glabrescens; corolla alba, hypocrateriformis, utrinque



glabra, tubo variabili, 1–1.5 cm. longo, lobis ovatis vel suborbicularibus, glabris, margine ciliatis; stamina longe exserta, glabra; ovarium quadrangulare vel 4-lobatum, glabrum; stylus filiformis, teres, glaber, usque ad 3 cm. longus. Fructus submagnus, abortu 1-pyrenus; pyrena elongata, nucleis reductis appendiculiformibus basi suffulta, monosperma, glabra, 3–4 cm. longa, 1.5–2 cm. diam.

S a n C r i s t o v a l I s l a n d : Waimamura, alt. 50 m., *Brass* 2635, August 11, 1932. Y s a b e l I s l a n d : Tiratoña, alt. 600 m., *Brass* 3399, Dec. 29, 1932. — Vernacular name “Naosokoño.”

Perhaps this is not really different from the typical form, but it has a glabrous corolla.

**Gmelina moluccana** (Bl.) Backer in Heyne, Nutt. Plant. Ned. Ind. 4: 118 (1917); Bakhuizen in H. J. Lam & Bakhuizen, Rev. Verb. in Bull. Jard. Bot. Buitenz., sér. 3, 3(1): 67 (1921).

S a n C r i s t o v a l I s l a n d : Waimamura, sea level, *Brass* 2860, Sept. 12, 1932.

**Gmelina salomonensis** Bakhuizen, spec. nova.

PLATE 122

Arbor speciosa. Ramuli crassi, teretes, novelli rufo-tomentosi, vetustiores glabrescentes, sparse lenticellati. Folia opposita, longe petiolata, coriacea, ovata vel oblongo-elliptica, basi cordata vel subtruncata, apice acuminata, obtusa, integerrima, 15–35 cm. longa, 10–24 cm. lata, supra viridia, lucida, primum sparse pubescentia, denique costa et nervis exceptis glabra, subtus grisea, submolliter rufo-tomentosa, basi nonnullis glandulis parvis obsessa, costa supra leviter subtus valde prominente, utrinque glabrescente, nervis lateralibus utrinsecus 12–18 pallidis, supra prominulis glabris, subtus prominentibus rufo-tomentosis, venis reticulatis utrinque prominulis. Inflorescentiae terminales, elongatae, paniculiformes, dense ramosae, infra foliatae, rufo-tomentosae, bracteolatae, dense multiflorae, 20–30 cm. longae, 10–15 cm. diam.; bracteae parvae, lineari-oblongae, utrinque acuminatae acutae, utrinque tomentosae, mox deciduae. Flores minores, pedicellati; calyx cupuliformis, regulariter obtuseque 5-dentatus, extus rufo-tomentellus, glandulis 2–4 parvis vestitus, intus glaber, 0.3–0.4 cm. longus et diam., fructifer subaccrescens; corolla minor, inaequaliter 5-lobata, subbilabiata, utrinque pubescens, statu sicco ca. 1.5 cm. longa, tubo inferne angustato in faucem ventricosam ampliato, intus ad insertionem staminum longe hirsuto, superne glabrato, calyce multo longiore, 0.7–1 cm. longo; stamina 4, didynamia, vix exserta, statu sicco 0.5–1 cm. longa, filamentis glabris; ovarium subglobosum vel obovoideum, apice subtruncatum, glaberrimum; stylus filiformis, teres, sparse pilosus, vix exsertus,



statu sicco ca. 1 cm. longus. Drupa minora, ovoideo-globosa, nitida, maturitate nigra, statu sicco 1.2–1.5 cm. diam.; calyx fructifer leviter excrescens, subapplanatus vel marginibus reflexis, quinatus, 0.5–0.7 cm. diam.

Y s a b e l I s l a n d: Tiratoña, alt. 600 m., *Brass* 3309, Dec. 8, 1932. — Vernacular name “Koko.”

This plant is intermediate between *G. moluccana* (Bl.) Backer and *G. macrophylla* (R. Br.) Benth. and may be a hybrid of these species. From *G. moluccana* it differs in the tomentose under side of the leaves and the villous calyx; from *G. macrophylla* in the terete branches, the elevated nerves and veins on the upper side of leaves, somewhat in the form of panicles, but especially in the small and regular 5-toothed calyx.

**Petraeovitex multiflora** (Sm.) Merr. var. **salomonensis** Bakhuizen, var. nova.

Frutex scandens, gracilis; ramuli quadrangulares, primum tomentelli, glabrescentes. Folia opposita, ternata vel inaequaliter biternata; foliola 3–9, minora, sessilia, chartacea; foliola lateralia ovato-oblonga vel oblongo-elliptica, basi rotundata, apice obtuse acuminata, 1–4.5 cm. longa, 0.5–2.3 cm. lata, foliolum terminale oblongo-lanceolatum, utrinque attenuatum, basi decurrens, acute acuminatum, apice obtusiuscule acuminatum, 3.5–6 cm. longa, 1.5–2.5 cm. lata, omnia margine integra, supra glabra, subtus primo farinaceo-tomentosa, denique glabrescentia vel costa nervisque excepta glabra, nervis lateralibus 6–8 cum venis reticulatis utrinque prominulis; petiolus communis 2–3 cm. longus, petiolus lateralis 0.5–1 cm. longus, omnes superne canaliculati, cinereo-tomentelli. Inflorescentiae terminales, laxe paniculiformes, infra foliatae, multiflorae, 30–50 cm. longae, 20–40 cm. diam.; bracteae minutae lineares, tomentellae, 0.15–0.25 cm. longae; cymulae breviter pedunculatae vel superne subsessiles, 7–15-florae, tomentellae, 0.5–1 cm. diam., pedunculis 0–1 cm. longis. Flores parvi, subsessiles, albidii; calyx 5-dentatus, cinereo-tomentellus, 0.1–0.15 cm. diam.; corolla alba, extus minute pubescens vel glabrescens, in fauce albido-puberula, 5-lobata, lobis inaequalibus, reflexis; stamina 4, exserta, fauci inserta, glabra; stylus gracilis, exsertus, glaber, 0.3 cm. longus, stigmatibus bifidis; ovarium ovoideum, basi glabrum, apice cinereo-tomentellum.

B o u g a i n v i l l e I s l a n d: Kupei Gold Field, alt. 850 m., *Kajewski* 1686, April 11, 1930.

This variety much resembles *P. sumatrana* H. J. Lam, but it has sessile leaflets, a cinereous-tomentose calyx and a hairy ovary.

**Premna integrifolia** Linnaeus, *Mant.* 2: 252 (1771) s. l.



B o u g a i n v i l l e I s l a n d : Kieta, sea level, *Kajewski* 1566, March 30, 1930; Kugu-maru, Buin, alt. 150 m., *Kajewski* 1842. M a l a i t a I s l a n d : Quoimonapu, alt. 50 m., *Kajewski* 2330, Dec. 10, 1930. G u a d a l c a n a l I s l a n d : Vulolo, Tutuve Mt., alt. 1200 m., *Kajewski* 2503, April 14, 1931. S a n C r i s t o v a l I s l a n d : Waimamura, alt. 200 m., *Brass* 2624, August 10, 1932 (f. *taitensis* Schau.); Kirakira, *Brass* 2768, August 30, 1932; Star Harbour, *Brass* 3132, Oct. 1932. — Vernacular names “Garlu” (under no. 1842), “Qua-eu” (under no. 2330) and “Arru-arru” (under no. 2503).

**Teysmanniodendron Ahernianum** (Merr.) Bakhuizen, comb. nov.

*Vitex Aherniana* Merrill in Bur. Gov. Lab. Bull. 6: 18 (1903).

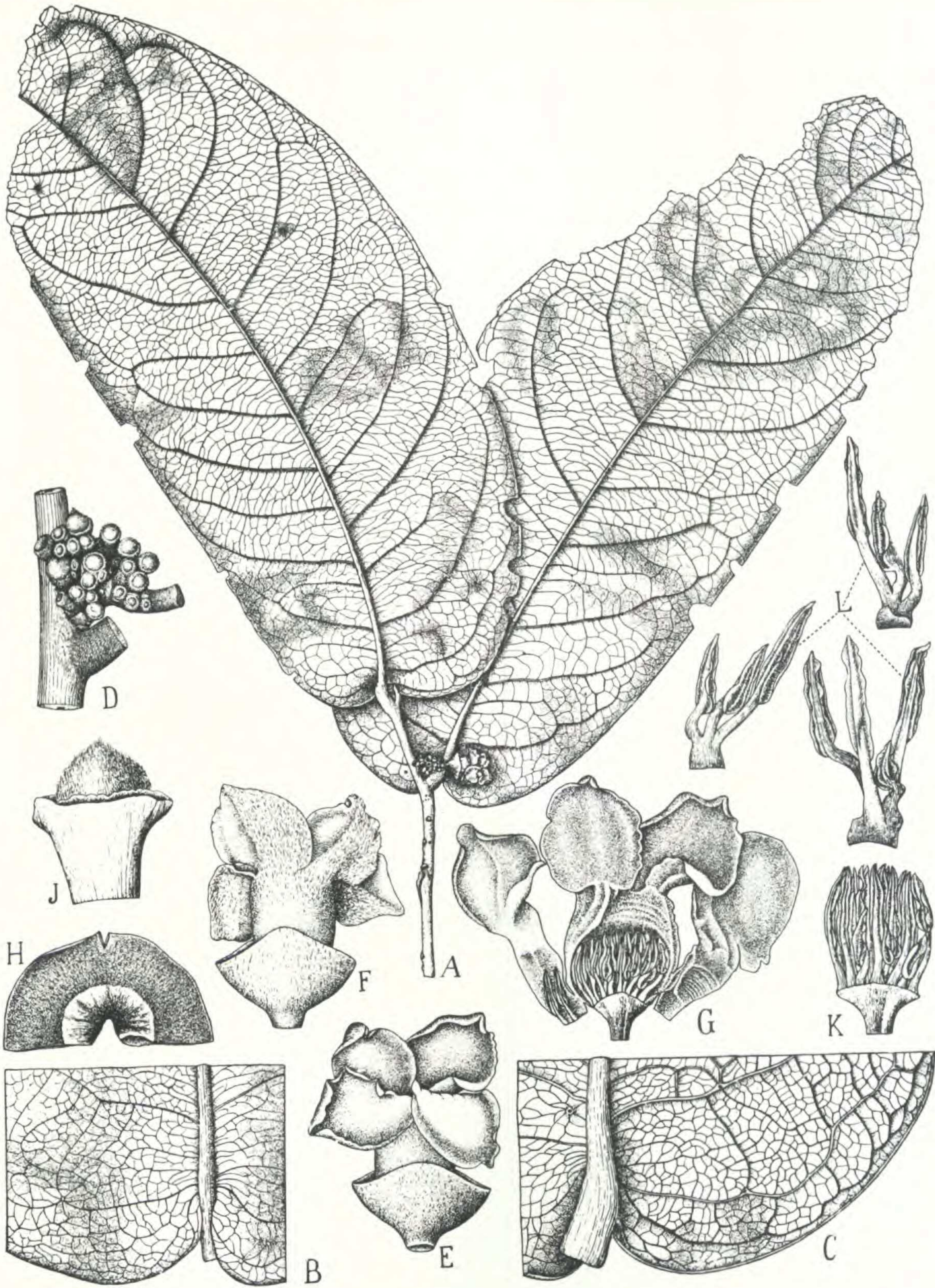
A large sized tree, up to 50 m. high; bark grey or brown; wood hard, brown; branchlets round, greyish, rufous-pubescent, glabrescent. Leaves 2–3-foliolate, short petioled; petiole terete, rufous-tomentose, especially at the base and in the insertion of the petiolules, 4–5 cm. long; petiolules in all leaves equal, furrowed above, thickened and rufous-tomentose at the base only, otherwise glabrous, 2–4 cm. long. Leaflets oblong, coriaceous, rather rigid, shining above, glabrous on both surfaces, except pubescent on the midrib beneath when young, 10–32 by 4–13 cm., reticulations of leaves very dense beneath. Cymes axillary, many-flowered, 15–30 cm. long; peduncles 1–2 in the axils, flattened, rufous-tomentose, 5–12 cm. long. Flowers rather small; calyx funnel-shaped, obscurely 5-dentate, rufous-sericeous, 0.4–0.5 cm. long, and wide; corolla with very short tube, glabrous at the base, otherwise sericeous, throat and base of the lip densely villous; ovary globose, glabrous, biloculate. Fruit oblong or pear-shaped, purple green when ripe, shining and striate when dry, 1.5–2 cm. long, 1–1.5 cm. diam., one-seeded; exocarp coriaceous, thin; seed oblong, 1 cm. long, 0.5–0.7 cm. diam.; fruiting calyx enlarged, cup-shaped, truncate, 0.5 cm. long, 0.5–0.8 cm. in diam.

Y s a b e l I s l a n d : Tataba, alt. 50 m. *Brass* 3441, Jan. 5, 1933. G u a d a l c a n a l I s l a n d : Sorvorhio Basin, alt. 200 m., *Kajewski* 2715, Feb. 3, 1932. — Vernacular name “Seupa” (under no. 2715).

**Vitex cofassus** Reinwardt ex Blume, Bijdr. Flor. Ned. Ind. 813 (1826).

B o u g a i n v i l l e I s l a n d : Kieta, sea level, *Kajewski* 1533, March 17, 1930; Kugu-maru, Buin, alt. 150 m., *Kajewski* 1843, May 28, 1930. M a l a i t a I s l a n d : Quoimonapu, alt. 300 m., *Kajewski* 2381, Dec. 16, 1930. G u a d a l c a n a l I s l a n d : Berande River, *Kajewski* 2387, Dec. 24, 1930; Mamassa, Konga, alt. 400 m., *Kajewski* 2489, Feb. 13, 1931; Vulolo, Tutuve Mt., alt. 1200 m., *Kajewski* 2605, May 1, 1931. S a n C r i s t o v a l I s l a n d : Balego-





*DIOSPYROS INSULARIS* Bakh.